★ WARS

WyTRCC's Efforts to Improve The Wyoming Accident Reporting System (WARS)

Data Dictionary

Links

August 31, 2004

WORKING DRAFT COPY

Drafted By: Jim Stout

Roadway Data Elements Obtained After Linkage To Other Data.

Data linkage expands the usefulness of each data file being linked without the delay and expense of new data collection. Linkage makes it possible to evaluate the relationship between specific roadway, crash, vehicle and human factors at the time of a motor vehicle crash.

It also permits these factors to be linked to health outcome data to determine their association with specific medical and financial consequences.

At the same time the linkage process itself improves the quality of State data and promotes collaboration between the Traffic Safety, Highway Safety, Planning and Injury control communities.

Wyoming has many elements that we are currently unable to link that we have chosen to collect on the Investigating Officer Crash Report. At the same time we will continue to work towards developing data linkage capabilities so that, over time, we will be able to obtain, via linkage, all of the information.

These are the remaining Roadway Data Elements, we desire linkage to. These are NOT collected at the scene because it's not reasonable to expect an investigating officer to determine.

L1. Bridge/Structure ID Number

Definition - A unique federal inspection/inventory identifier assigned to a bridge, underpass, overpass or tunnel.

Source - Roadway Inventory

Attribute - Number as described in Recording and Coding for the Structure Inventory and Appraisal of the Nation's Bridges, December 1988, Federal Highways Administration, item 8, and HPMS/90 item 77.

Rationale - Important for Bridge Problem Identification and analysis.

L2. Roadway Curvature

Definition - The measurement of the curvature in the roadway expressed in terms of it radius, length, and superevelevation.

Source - Roadway Inventory

Attributes:

4 Subfields

Rationale: Curve data is used in searching for and diagnosing high crash locations.

L3. Grade

Definition - the inclination of the roadway, expressed in the rate of rise or fall in feet per 100 feet of horizontal distance.

Source - Roadway Inventory

Attributes:

2 Subfields

Rationale: Used to identify possible causes and countermeasures of high crash sites.

L4. Part of the National Highway System 1A

Definition - Designation as part of the National Highway System.

Source - Roadway Inventory

Attributes:

Y Yes

N No

U Unknown

Rationale: Important to monitor highway safety on the National Highway System.

L5. Annual Average Daily Traffic

Definition - the average number of motor vehicles passing a point on a trafficway in a day, averaged for all the days of the year, during a specific year.

Source - Roadway Inventory

Attributes:

2 Subfields

AADT 6N

Year 4N

Rationale: Important to normalize crash data to account for exposure.

L6. Width of Lanes

Definition - Lane width in feet.

Source - Roadway Inventory

Attributes: 2N

Rationale: Important to monitor association of lane width and the frequency of crashes.

L7. Width of Shoulders

Definition - Shoulder width in feet.

Source - Roadway Inventory

Attributes: 2N

Rationale: Important to monitor association of shoulder width and the frequency of crashes.

L8. Width of Median

Definition - Median width in feet.

Source - Roadway Inventory

Attributes: 2N

Rationale: Important to monitor association of lane width and the frequency of crashes.

L9. Access Control

Definition - the degree that access is controlled by public authority.

Source - Roadway Inventory

Attributes:

Full Control Partial Control No Control

Rationale - Important to guide future highway design and traffic control.

L10. Railway Crossing ID

Definition - a unique US DOT/AAR number assigned for identification purposes to a railroad crossing.

Source - Roadway Inventory

Attributes: Specific Number assigned by the State in cooperation with the American Association of Railroads.

Rationale - Important in determining the need for additional controls, and evaluating the various types of controls.

L11. Roadway Lighting

Definition - the type of roadway illumination.

Source - Roadway Inventory

Attributes:

No lighting Spot Illumination Continuous Lighting Rationale: Important information for determining the effect of lighting on roadway crashes.

L12. Pavement Markings Function and Color

Definition - longitudinal markings used on the roadway surface to guide or control the path followed by drivers.

Source - Roadway Inventory

Attributes:

Centerline, Skip Dash, Yellow
Centerline, Solid, Yellow
Centerline, Solid Double, Yellow
No Passing Barrier, Right or Left, Yellow
Lane Line, Skip Dash, White
Lane Line, Solid, White
Edge Line, Left, Yellow
Edge Line, Left, White
Left Turn Lanes
Turn Arrows
Unknown

Note: Any combination of the above is possible...

Rationale: Important to compare the existence of pavement markings with crash data.

L13. Pavement Marking Material

Definition - The material pavement markings are made of.

Source - Roadway Inventory

Attributes:

Paint
Thermoplastic
Raised Markers
Permanent Inlay
Tape
Other
Unknown

Rationale: Important to compare the type of pavement markings with crash data.

L14. Bikeway

Definition - Any road, path, or way which is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Source - Roadway Inventory

Attributes:

No Bikeway Bicycle Route (Signed) Bicycle Route (Striped) - Right Only Bicycle Route (Striped) - Left Only Bicycle Route (Striped) - Both Sides Separate Bicycle Path/Trail Unknown

Rationale: Needed to determine usage and safety of bicycle facilities.

L15. Delineator Presence

Definition - The presence or absence of a series of reflecting devices mounted at regular intervals on the side fo the road.

Source - Roadway Inventory

Attributes:

None
Delineators Right
Delineators Left
Delineators Both Sides
Tall Delineators
Unknown

Rationale: Important to determine delineator effectiveness.

L16. Traffic Control Type at Intersection

Definition - Type of Traffic Control device at the intersection where the crash occurred.

Source - Roadway Inventory

Attributes:

No Control

Stop Signs on Cross Street Only

Stop Signs on Mainline Only

Four Way Stop Signs

Four Way Flasher (red on Cross Street)

Four Way Flasher (red on Mainline)

Four Way Flasher (red on all legs)

Yield Signs on Cross Street Only

Yield Signs on Mainline Only

Signals Pre-Timed (Two Phase)

Signals Pre-Timed (Multi Phase)

Signals Semi-Actuated (Two Phase)

Signals Semi-Actuated (Multi Phase)

Signals Fully-Actuated (Two Phase)

Signals Fully-Actuated (Multi Phase)

Other

Unknown

Rationale: Important to understand the relationship between crashes at intersections and the type of traffic control device present.

L17. Total Volume of Entering Vehicles

Definition - Total entering vehicles for all approaches of an intersection.

Source - Roadway Inventory

Attributes:

AADT

Rationale: Important to understand volume of crashes as a measure of exposure for mainline approaches.